

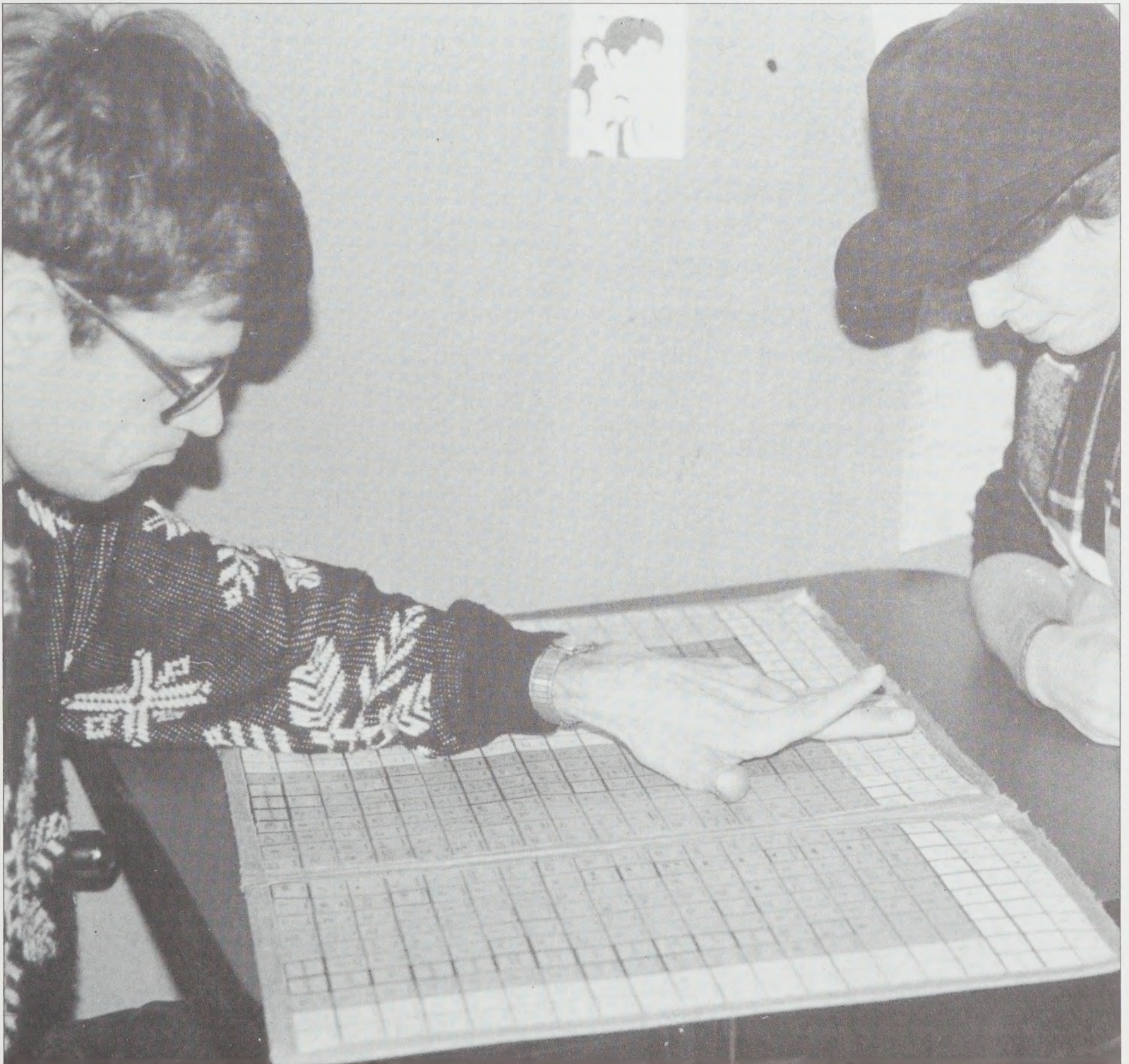
COMMUNICATING TOGETHER



A QUARTERLY MAGAZINE ABOUT AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

VOLUME 8, NUMBER 1

MARCH 1990



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VOL. 8, NO. 1 MARCH 1990

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BEATING THE CIRCUMSTANCES

Can We Communicate with our Forgotten Future Generation?

PAUL MARSHALL

Every Thursday morning, twenty-six-year-old Paul Marshall boards a Grey Coach bus, and makes his way from the family farm near Binbrook, Ontario, into the heart of downtown Toronto.

For much of his life, Paul has had an intense desire to help troubled teens. He has found his place with the Evergreen drop-in centre for street youth on Yonge Street in downtown Toronto.

There, Paul offers personal one-on-one counselling to street kids, and sometimes just an ear to listen, or a shoulder to cry on.

This is not as easy as it sounds. Paul Marshall has cerebral palsy, and communicates with a Blissboard.

On his journey through life as a nonspeaking individual, Paul has acquired some interesting and relevant ideas on communication, which he shares with us in this article.

The forgotten people are the kids that live in our cities across North America. They don't have addresses or telephone numbers. Their homes are our streets, roads, and highways across our nations. Where do they come from? Where will they go? How do they live on the street, and why? In this article, I would like to share with you my story as a nonspeaking person working in a mission, and hopefully give you a few things to think about.

As I was growing through my teen years, I went through many trials, and I went through a few school systems and got the old "run around". I guess because of these things, I made up my mind that I wanted to work with youth who didn't make it in our "normal systems". I thought about this for a long time before saying anything. I was nonspeaking, and I knew that it would be hard to get a job in this field. I looked into a few social work programs, and my fears became reality. They didn't see how a nonspeaking person could

work in the social work job market.

A couple of years ago, I was at a Bible weekend, and the guest speaker worked at a place for street youth in Toronto. I made up my mind to go and speak to him after his presentation. To my surprise, he said "Sure, come on down and give it a try." Within a month, I found myself with my Blissboard open, talking with a person who lived on the streets of Toronto.

I was shocked when I found out that 15,000 kids lived on the Toronto streets alone. I can remember when I started at Evergreen, I was appalled that we had kids living on the streets of Canada. That shows how blind I was. Then I started to realize that a system like ours has to have fall-outs that most of us don't see. Youth living in our inner cities represents one of those growing problems.

Realizing that counselling was what I really wanted to do with my life, I had to come up with new ideas on communicating with these kinds of people. The system I grew up in told me if you want to do this kind of work, you must be able to talk. I fought with this idea for many months over the past two years. It took a long time for me to break that old way of thinking.

The Meaning of Communication

The meaning of the word "communicate" is to convey knowledge of or information about; make known; to disclose, to share, to care, to build relationships. I really believe we simplify the word communicate. When we hear the word communicate, we think of talking with our mouth. What about communicating with our body? What is our lifestyle saying to people around us? I am finding nonverbal messages are very important to communication.

Fifteen thousand of our future adults are losing out because of our lack of understanding of that one word — communicate. There are 600 kids who want and need to be loved coming through our doors at Evergreen each week. They are dying to have someone spend some time with them; to see that someone will always be there for them. They need someone to play games, to share troubles, to laugh with them, and be their friend, to let them know that someone will be there next week and the week after that. This is communication in its most powerful form.

We are fooling ourselves when we think that we must require a



Paul Marshall and his friend John with Sam Eller, co-ordinator of Evergreen.
Photo by Carol Lynn.

social work degree to work in this field. A subculture like the street people needs basic love and caring so they can start to trust. No degree teaches us how to love. It takes a person with an open, caring heart. Don't get me wrong. I have taken courses in psychology, sociology, and relationships, and I learned a great deal from them. But the common bond of love communicates so much more. Some of our best workers are street kids who have had very little structured education, but have turned their lives around, and are now a very significant part of our ministry.

The number of street kids is growing each year. The breakdown in families is growing. The breakdown in our communication is the biggest problem. Our society has a love for money, and everything that money can buy; everything but love, trust, self-worth, the relating to other people, and the building blocks which we all need in our childhood years. Most of these kids come from good income families; but their parents are too busy trying to keep up high standards. After a day of work and social wants, there is no time or energy to have valuable time with their kids. Others are physically and/or mentally abused. So these kids are "faked right out" and have grown up to have low self-worth. They turn to the street where they hide from the world. When we think of

street kids, most of us think of kids that rebelled from the system. Most of these kids are just trying to stay alive. One of our jobs at Evergreen is to try to help them reach the stage where they can start pulling the parts together and begin a better way of life.

Seeing the World Around Us

In my year-and-a-half at Evergreen, my whole outlook on life has changed. My eyes have been opened to many things.

Can't we hear and see the world around us? Do we choose to be blind? Do we have to walk in another's footsteps, or are we, as human beings, capable of choosing our own lifestyles? Can we communicate as individuals, live each day as best we can, with a smile?

I believe there is a higher cause to what we really see. I don't see every effect of my work at Evergreen, and I never will. We as human beings have to see that what we do is a part of the larger picture, and in my eyes all this comes down to communication.

I am nonspeaking, and if I listened to the world around me, I wouldn't be where I am today. I will never have the things that some people have, but that is fine with me. Living in these last decades of the twentieth century, let alone growing up in them, is different, to say the least.

Picture yourself as a fifteen-year-old kid, walking down a dark back street on a cold, windy night in a city you don't know, with only the clothes on your back, and two dollars in your pocket. You can't go back home because life there was unbearable. You need food, a place to rest; not sleep, because you are too scared to even think about sleeping. What would you do? Where would you go? How would you get your food? This is "life" for these kids.

If, somehow, they can see that I am happy, and making a life for myself, maybe some of them might change their lives and recover because of my work. This is what I call communication in its best form.

I believe the full meaning of life is the giving of one's self to better the world around one. Also I believe there is a lot of meaning to one's lifestyle, and what people see from that lifestyle.

We as individuals *can* change the world. I remember a good friend, a teacher, who once said, "If I can change one person's life, it is all worth it." Verbal and lifestyle communication are two of the most powerful tools we have to change things around us.

Let's use the tool of communication in the right way. □



Paul making a point with his Blissboard.

Join ISAAC Now

The International Society for Augmentative and Alternative Communication (ISAAC) offers four types of memberships:

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Another Challenge for Andrew

KARI HARRINGTON



Kari Harrington was in the original Blissymbol class of 1971 at the Ontario Crippled Children's Centre. Since then, she has completed elementary school at James Robinson Public School in Markham, Ontario, and more recently, high school at Langstaff Secondary in Richmond Hill. She is attending a life skills class at Markham Participation House, and hopes to move there soon.

Do you remember reading about how Andrew Murphy went on two "wilderness" camping trips and survived — in fact even enjoyed them? Well, now Andrew is facing the new challenge of going to university.

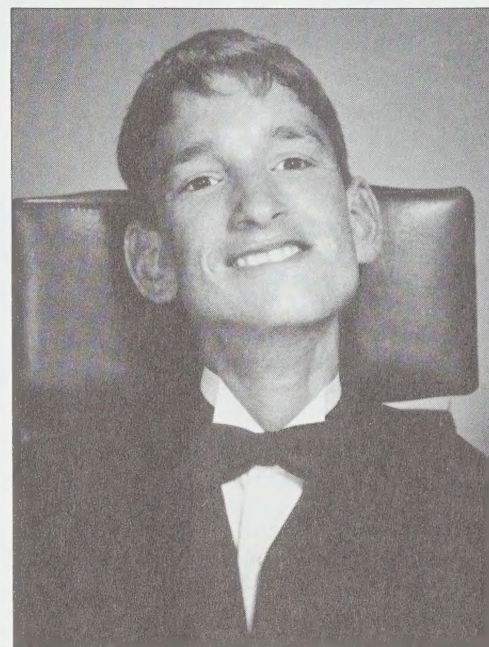
Edinboro University of Pennsylvania certainly is not in the wilderness for it has a beautiful campus, and special facilities are set up for disabled people. However, on this adventure, it is Andrew who has all the responsibility to make things happen the way he wants them to. There is a lot more to think about at Edinboro than in the wilderness! In one of Andrew's letters, he spoke of how he must

plan his days ahead of time. Whatever he needs done or whatever he needs help with, he has to *ask* the personal care attendants or the academic aides or the meal aides or the tutors. There are so many different people he must communicate with in order to take care of his personal needs: to be fed, to get his banking and bill paying done, to look after his laundry and to get his room cleaned. And that's on top of what he is at Edinboro for, to study and learn!

This year, Andrew is taking three credit courses, Philosophy, Introduction to Art, and Computers, as well as spending two hours a day on his new communication system and extra writing classes to improve his writing skills. I feel exhausted just thinking about it!

There must be many times when Andrew feels exhausted too, but in his letter he writes about how it is all worth it. He loves Edinboro University and the great people there who are so caring and he loves the freedom of being away and doing anything he wants. This balances all the responsibility he has, and makes him feel very adult and independent.

Keep up the good work, Andrew. □



Andrew Murphy

Editor's Note:

Kari always likes to get mail from readers around the world. If you have news to share in "Family and Community" write to:
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16 Jonquil Crescent,
Markham, Ontario, Canada
L3P 1T4

COMMUNICATION OUTLOOK

Communication Outlook is an international quarterly offering a multi-disciplinary source of information on the latest products, and research & development in augmentative and alternative communication.

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ACS - A Company Committed to Research and Development

DAVID GORDON



"Success is measured by the personal satisfaction achieved from what you are doing." This is the personal motto of David Gordon, President and founder of Adaptive Communication Systems, (ACS) Inc. David believes that this is not only applicable to himself, but also to disabled persons who can be helped through technology.

From its beginning as a gleam in David Gordon's eye, Adaptive Communication Systems (ACS) has grown into a successful international company. ACS has always been committed to and invested heavily in research and development. In 1982, David Gordon was involved in fitting and providing state-of-the-art adaptive seating systems for disabled clients in Pittsburgh, Pennsylvania. Working as a direct service provider, he came into daily contact with speech therapists, occupational therapists, physiotherapists and consumers. He kept hearing that there was a crying need for communication devices which were truly portable, functional and affordable. In looking around at what was available, he saw "mass market" technology which might be spun off to address the problems identified by his colleagues. The creation of SpeechPac™

was the start of an on-going and continuously growing company with an ever expanding number of products and services. In the following article, David reflects on some of his past developments and his commitment to research and development.

I believe, to make a significant improvement in the life of our clients is the single most important factor in the planning of all new research and development.

ACS was never afraid to take a leading role in research and development in applying the latest technology to develop devices for the disabled. The first major achievement was the Speechpac™. The Speechpac™ was a portable voice synthesizer adapted to the Epson HX20 computer. It was the first small, battery operated voice synthesizer with a full keyboard, built in printer, liquid crystal display (LCD) and microcassette drive.

Over a brief time, the Speechpac™ grew to assist more people by evolving onto the Scanpac™ and Evalpac™. Both are multipurpose devices that provide voice output and computer access by alternative methods such as scanning, light pointers, joy stick, morse code, and expanded keyboards. Because of its multiple access methods and ease of programming, the Evalpac™ became one of the accepted standards of the industry in schools and clinics for assisting in the evaluations of clients.

A couple of years later came the introduction of the ALLTALK™, the first reprogrammable, digital, battery operated, portable device for nonspeaking people. Digital speech first appeared in cars that would speak out in a human voice and tell the driver: "Your lights are on" or "Your door is open". But this technology was nonportable and too limited. However, the concept inspired the idea of improving it and making it adaptable to nonspeaking people to give them a more human sounding voice.

I consulted with the top engineers in the field of digital speech and produced the ALLTALK™ which is

still a popular digital human voice communication device.

The RealVoice™

The next significant project was the development of the RealVoice™. The RealVoice™ took text-to-speech synthesis from sounding like robots to a new level of high quality human sounding speech using both female and male voice. The first version of RealVoice™ was adapted to the previous products with the Epson HX20, Scanpac™ and Evalpac™. One of my highest moments of personal satisfaction happened when an augmentative consultant and I delivered the female RealVoice™ to a thirteen year old girl who had been using a robotic voice. After the RealVoice™ was connected to her previous system she instructed her mother to call her father at work. When her father was on the phone, her first message to him was "Hi Dad, how do you like the new me?"

ACS has recently released the second version of the RealVoice™ for IBM compatible computers and by the time you read this, the RealVoice™ for the Apple computer should be available or just around the corner.

As ACS became more successful, other quality companies have asked to be part of the ACS product line. Now ACS is a mix of products developed by ACS, and devices and software by such companies as Words+, Pointer Systems, Inc., Sentient Systems, Inc., and Daedalus Wheelchair Mounting Systems.

Since the first product, ACS has had continuous growth with constant research and development. One of my concerns has been early education and providing disabled children with creative concepts of play. I believe that educational computer programs are one of the greatest things that has ever happened for disabled children. But the concept of play using three dimensional objects needs to be expanded.

This brought about the development of the ToyPac and the new Flexi-Form Board™. The Flexi-Form

Board™ concept was created by Dr. Debbie Gilden at the Smith Kettlewell Foundation for the Blind in San Francisco. When I first met Debbie and saw the project, I realized it had sound educational concepts for more than just visually impaired children.

Future Growth

ACS is still aggressively conducting research and development on new projects. Many qualified people are in place and more are coming to provide positive input for the future. The ACS staff includes speech pathologists with years of experience in augmentative communication, research engineers, software programmers, and the recent addition of a child psychologist.

I believe the future of ACS will be "more and better things to come" that will make people more successful in life.

Success is a chain reaction. For example, ACS was successful in developing and providing computer access and voice output. A speech language pathologist was successful in providing the proper device for a nonspeaking disabled adult. The user was successful in obtaining gainful employment. The employer was successful because he had a productive employee. The government was successful in getting a new taxpayer. A portion of his tax dollars will go the education of disabled children. Isn't that the way it should work?□

It's Report Card Time

We are doing a reader survey about **Communicating Together** and need your help. A questionnaire is enclosed with this issue. Please take a few minutes to complete it.

- Let us know what sections you like best or least.
- Give us suggestions for improving.
- Offer ideas for new stories or articles.
- Tell us how we're doing.

On completing our Report Card, just fold, staple, stamp and mail it. Help us find the best means to keep **Communicating Together**.

PERSPECTIVE

The Perspective of Alan Newell

SHIRLEY McNAUGHTON



Alan Newell

In May, 1988, I had the pleasure of attending the session relating to research in augmentative communication at the Conference on Priorities for Research in the Prevention, Treatment and Management of Childhood Physical Disability, held at the University of Western Ontario, London, Ontario and sponsored by the Easter Seal Research Institute. At that meeting Alan Newell, Director of the Microcomputer Centre at the University of Dundee, Scotland, offered a paper on a "consideration of philosophical and strategic issues" relating to communication technology. From the presentation and the discussion that followed many stimulating ideas developed.

When I was invited to visit the Dundee Microcomputer Centre in October 1989, I eagerly accepted. I looked forward to a further sharing of ideas with Alan Newell and to the opportunity to learn more about the work of his colleagues at the centre. The perspective that follows is derived from Dr. Newell's presentation at the conference in London, Ontario in 1988, and his comments during a conversation we had in Scotland on October 18, 1989.

Shirley McNaughton

University of Dundee's Microcomputer Centre is a research organization with close links with local

patients and students. Although as part of our research we provide prototype systems to individuals and groups, we do not have any formal service commitment. The advantage of our situation is that we can concentrate on long term research without the problems of day-to-day services which have a habit of taking over. Because it is not our primary role to help individual people, we have the freedom to dream and to try out things that haven't been done before, and might not work. We have the luxury, for which I'm grateful, to be able to spend more time trying to understand the problems and to try out radically new solutions. This can be much more difficult to do if you have a service commitment.

Our research strategy is not closely focused on today's perception of clinical needs, but has a five-to-ten-year time-frame. Unless the customer population is very enlightened, their perceived needs are often articulated as the detailed inadequacies of current systems. This usually implies day-to-day and month-to-month problems, and these are properly dealt with in a service environment. This service is, of course, vital, and should be linked to research environments to their mutual benefit. Because the needs of the two environments can be very different, however, it is counter-productive for short term needs to be allowed to dominate a long term research environment.

With a five-to-ten-year time-frame, the primary interest should be in radical change, the effects of which cannot be fully foreseen. Good ideas are unlikely to come entirely from within the boundaries of the discipline as it is currently perceived. They will break new ground and be contrary to "received wisdom". Unless an idea creates at least some scepticism, or even hostility, it is unlikely to be really novel. Early motor cars were seen as somewhere between a threat and a device of the devil, and certainly useless. In their early days, they had few supporters. It is difficult to predict losers and impossible to predict winners in these situations.

We thus encourage a wide perspective in our researchers. Clearly they need a thorough knowledge of current practices, but also a healthy scepticism, and we must be prepared to back their hunches. Although we need to keep our researchers' "feet on the ground", we should be wary of condemning new ideas too readily. It is too easy to dismiss radical solutions and demotivate a good researcher. Similarly, funding agencies should be wary of being too conservative and only supporting work which will clearly be successful. The future is a gamble and the longer the time-scale, the longer the odds.

The Research Team

In considering the requirements for a research team, I try to ensure that members are fully familiar with, but not dominated by, service needs. Particularly in view of the current trends in technology, researchers should spend a greater proportion of their time thinking about *what* they want to achieve rather than *how* they are going to achieve it. The team should be fully multi-disciplinary. The work is too important and complex to be left to engineers and computer scientists. Thus, when I apply for a research grant, I request funding for a therapist or a special education teacher, who can go out and work in liaison with local therapists and their clients or local teachers and their pupils. Speech pathologists and teachers should be encouraged to take a more active role in the design process, and become full time members of the design team. An advantage would accrue from including representatives from unfamiliar disciplines: linguists, anthropologists, philosophers (I've just hired one!), sociologists, graphic designers, and people with experience of "communication media", such as television. But interdisciplinary team work means that all the disciplines involved must be prepared to compromise. If you are a speech pathologist and want to do research in technology-based AAC, then you've got to be prepared to cope with knowing less about speech pathology than someone who remains within that discipline. Similar comments, of course, apply to a computer technologist. It's

important to have one's own roots, but it's also important to stretch out and touch other people and this inevitably takes time.

Communication Technology

I believe we are at a watershed as far as communication technology is concerned. We need to look carefully at strategy. In the late 1950's and early 1960's, relatively simple technology provided substantial gains in assisting the communication problems of persons with disabilities. Various systems were used to great effect, though many were cumbersome and primitive. In the 1970's, advances made in electronics served to provide more robust, smaller and lighter systems. However, these were relatively expensive, or were produced in people's spare time with all the disadvantages that this brought. With the turn of the next decade, the home computer brought increasing power and storage capacities. The facilities potentially available to the person with a communication impairment were greater than the wildest dreams of the early pioneers. In the 1980's, advanced techniques were found in all aspects of the system: sophisticated input methods, predictive and other techniques to reduce the number of input selections required, and good quality, unlimited vocabulary speech synthesis.

These systems were hailed by many as "solving the problems of persons with communication impairments". As a greater range of devices became available, however, more data was gathered on their usage, and it became clear that the devices were not as popular as we had been led to believe. We reach the end of the decade with the question, "what is wrong with our technology?". We need to ask, "why is it not used?" and, much more importantly, "what can we do to improve the situation during the next decade?".

In 1965, my own work involved building a speech recognition machine and I was urged to try to apply it for the disabled. I developed a "listening typewriter" that actually worked because you spoke morse code at it. Although it was never marketed, it introduced me to the possibilities and excitement of

developing something for persons with disabilities. When I moved into an academic job and was able to choose my own field of research, I decided to focus upon applications of computer technology to the disabled, and the talking brooch was the result in 1974. It came at a time of great technological change, however, and it was too heavy and too inconvenient. It should have been completely re-engineered, but that would have cost many tens of thousands of pounds and nobody was prepared to put in that sort of money. If I had been able to re-design the talking brooch, it may have been much more widely used.

In those days, it was difficult to produce devices so we spent most of our time implementing our ideas. These days it's much easier to produce systems and therefore much more important to decide very carefully what to do. We now know *how* to implement systems. We know much less about what is the most appropriate system to implement. We know so little about what the needs and wants of AAC users are that the chances of us producing the perfect aid is almost zero. All we can hope to do is indirectly provide something that is more useful than anything else in a particular situation.

I am excited about using synthetic speech for augmentative communication. Speech synthesizers are now part of many AAC systems, and that is a very important advance. I believe, however, that the voice is primarily used for making social bonds with other people, and we still have a long way to go: the systems available today are incredibly good at doing many things, but much less good at helping nonspeaking people to make friends. What we are trying to do at Dundee is to produce systems in which the primary aim is to facilitate interaction. The way speaking people do this depends on who they are talking to, what they are talking about, and where they are. We're trying to build parts of the jigsaw so, for example, our PAL¹ system is a way in which individuals can, as efficiently as possible, say exactly what they want to, and sometimes that is very important. In many social situations, however, it doesn't matter very much what is said as long as one says something. That is

where CHAT² fits in. It's for those very important conversations and parts of conversations which are almost entirely designed to improve social bonding. We say things that we've said often before and all that really matters is that we sound friendly and we don't bore people by saying the same thing to the same people. We're also looking at ways in which we can make synthetic speech contain some of the emotional cues that real speech contains. For example, we are developing methods which can make a speech synthesizer sound angry or happy or sad.

We owe a lot to our links with Arleen Kraat and other researchers from overseas. Different cultures have different things that are important about communication. Because communication is so complicated, we tend to concentrate on the aspects of communication which we believe are important and try to provide AAC systems which assist with them. By having an international perspective we can begin to appreciate a wider range of requirements than we would do otherwise. Different cultural approaches mixed together are very important in AAC in a way which I don't think is true of nuclear physics, or other hard science areas.

Nurturing New Ideas

My dream for myself is to continue working with my colleagues at the Microcomputer Centre and through our work to provide some new insights into the field of AAC. We have a team of fourteen researchers in the Microcomputer Centre working on an integrated program to develop AAC systems for the disabled, and I am very pleased indeed with the work they are all doing. At the Centre everyone works with a minimum of structure. We have many keen researchers who work together very well. I've been working with John Arnett since 1975 and with Norman Alm since 1985. I enjoy the way in which we complement each other, knowing each other's strengths and weaknesses. We provide an infrastructure and atmosphere which is designed to encourage new ideas, and we try to support our students and researchers and encourage

them to develop and refine these ideas. We hope through the Centre's projects to provide new perceptions on what is needed in AAC systems, and also to continue to transfer our more successful ideas to the market place so that the ultimate clients for our research — the communication impaired population — can benefit from them directly. □

Notes

1. PAL (Predictive Adaptive Lexicon) is a word-based prediction system which uses frequency and recency information to offer a list of probable words to the user (Swiffin et al, 1987). It is now marketed through Scotlander of Glasgow, 74 Victoria Crescent Road, Scotland.
2. The CHAT (Conversation Helped by Automatic Talk) system guides the user through a linear progression of speech acts and automatically produces appropriate sentences from a pre-stored selection of utterances (Alm et al, 1989).

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Association de Paralyisie
Cérébrale du Québec Inc.
Centre de Ressources Bliss
525, boul. Hamel est, Suite A-50
Québec G1M 2S8

United States

EBSCO Curriculum Materials
Box 1943
Birmingham, Alabama 35202
U.S.A.

Australia

Kathryn Barrett
The Spastics Centre
of New South Wales
5 Aquatic Drive
Allambie Heights, NSW 2100
Australia

Netherlands

Bliss-symbolen
Communicatiecentrum
Revalidatiecentrum
"De Trappenberg"
Crailoseweg 116
1272 EX Huizen, Nederland

Spain

Pilar Such Acin
ASPACE
Apartado 55
20.080 San Sebastian, Spain

United Kingdom

Blissymbolics Communication
Resource Centre (UK)
Thomas House, S.G.I.H.E.,
Cyncoed Centre, Cyncoed Road
Cardiff CF2 6YD, U.K.

Make your plans for Sweden

ANN KENNEDY

Ann Kennedy is Director of the Easter Seal Communication Institute, and Editor of Communicating Together. She has been a member of ISAAC since its inception and has attended all but one of the past biennial conferences.

It's hard to believe that the time is upon us to start making plans to attend the Fourth International ISAAC conference on Augmentative and Alternative Communication. It doesn't seem possible that almost a year and a half have passed since the last and highly successful meeting at Disneyland in Anaheim, California.

The team in Sweden, under the chairmanship of Cecilia Olsson, began immediately after the Anaheim meeting to begin planning for the conference to be held in Stockholm, Sweden, from August 12-16, 1990. The conference will be held at the Stockholm International Fairs and Congress Center located in the southern part of the city. Now that all the papers have been selected, the task at hand is finalizing the program for the four day meeting. The program will offer a challenging array of sessions on a variety of topics including: advocacy, assessment, communication/social interactions, manual signs and other unaided symbols, teaching and intervention, technology, and theoretical models and issues to name but a few.

A number of parallel sessions will be held on special subjects or themes that have been identified to be of special interest. The sessions will be organized by a chairperson and will provide an overview of the subject followed by a number of presentations. Some of the special sessions being arranged are on Service Delivery with Sarah Blackstone as chair, and In-Service Training, chaired by Mats Granlund.

The keynote speaker will be Bjorn Lindblom, presently a professor of linguistics at the Univer-

sity of Texas at Austin. Before moving to Texas two years ago, Dr. Lindblom was professor of the Department of Phonetics at Stockholm University. He is internationally recognized for his work in experimental phonetics and language development, and for his interdisciplinary approach to the theory of communication.

All Work and No Play

ISAAC meetings have always been known for the camaraderie they generate and Stockholm promises to be no exception. A conference buffet dinner will be held in the elegant Golden Hall of the Stockholm City Hall. An evening boat tour is being planned around some of the 25,000 islands that make up the scenic Stockholm archipelago. It has become tradition that there be a talent show at an ISAAC conference, and Stockholm will be no exception. Who knows what talents will be uncovered this year? Of course, we will all be expecting to hear again from some of the old "stand-by acts", so everyone start practising now!

Consumers are Expected

At the last ISAAC meeting in California, it was exciting to see so many consumers present and actively participating in presenting papers and serving as panel members in forums. The conference organizers in Stockholm are expecting a similar response this year. The travel costs from North America are high, however, and any consumer who is presenting a paper or participating in the consumer forum should consider applying to ISAAC for financial assistance. Deadline for applications is March 31, 1990. Applications should be submitted to Diane Bristow, Co-chair, ISAAC Consumer Committee, 6241 1/2 Nita Avenue, Woodland Hills, California 91367 USA.

**This section of
Communicating Together
is sponsored by
Pilot Club International,
Ontario District.**

Special Pre and Post Sessions Planned

On Saturday, August 11th, the ISAAC Developing Countries Committee will host a day which will provide participants with an introduction to AAC. An overview of assessment and intervention procedures will be presented and illustrated through case studies from different countries. The emphasis will be on application of inexpensive, non-technical communication systems for people with physical and/or developmental disabilities. The day will be chaired by Sudha Kaul, Director of Services at the Spastics Society of Eastern India.

On August 16th and 17th, following the main ISAAC conference, a Research Symposium will be held. All researchers are invited to attend. The purpose of this symposium is to provide a forum for small group discussions of methodological and conceptual issues in the AAC field and to encourage networking, active problem solving, and collaboration among researchers. Registration for this meeting will be limited and designated on a first come basis, so if you're interested in this, get your registration in early.

Start Making Your Plans Now

Even though winter is still upon us in many parts of the world, it's not too soon to start making plans. Summer is a busy travel time for everyone, pre-registration fees are less if you register before May 1, 1990, and now is the time to investigate special airfares to Scandinavia. We have found one regular summer charter flight from Toronto to Stockholm for approximately \$780 (Canadian) return. Anyone wanting more information on this can contact me c/o *Communicating Together*.

For anyone who has not had the opportunity of travelling in Scandinavia, I highly recommend taking extra time before or after the conference for sight-seeing. There is lots to see and do. Plan to have family or friends join you and make a holiday out of the trip. See you there. □

StoryBliss

SHIRLEY McNAUGHTON

In the September issue of *Communicating Together* Blissymbol Talk focussed on Blissymbols and literacy, I described the value and ease of reading and writing in Blissymbols as preparation to reading and writing in print. The confidence and interest that comes from deriving meaning first from Blissymbols and then from print was emphasized.

Our challenge as instructors is to provide successful reading opportunities, be they through the reading of Blissymbols or the reading of words. In the past this was done through the innovative work of good teachers. Many hours were devoted to adding Blissymbols to reading materials, making the content meaningful to young Blissymbol users prior to their independent reading of print. Even with this effort, however, the Blissymbol user with limited physical skills was unable to spend an equivalent amount of time with books to that spent by most able-bodied children. The physically challenged child's difficulty in turning pages and in maintaining the book in a stable, comfortable-for-reading position, has demanded a reliance upon others for reading experiences and this typically reduces the time that can be devoted to the enjoyment of reading.

Now, there is another option for Blissymbol users — independent reading using the Macintosh computer. The software is called StoryBliss. It provides new reading opportunities for Blissymbol users.

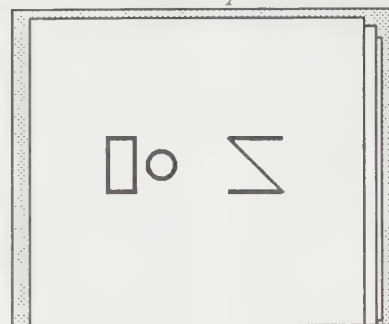
Here's How StoryBliss is Read

The section of StoryBliss that is used by the individual who wishes to read the stories is called *BlissReader*. Once this section has been selected, everything that happens is determined with a single switch, connected to the mouse port.¹ Those who are the readers are in control - setting the scan time required; selecting the story of their choice; choosing the graphic desired (Blissymbols alone, words alone, or Blissymbols and words together); deciding upon the type of voice to read the story (man, woman, boy or girl). Students can read through the book page by page, or spend extra time on selected pages, learning new words and reducing the number of Blissymbol cues given. They can repeat favourite illustrations or

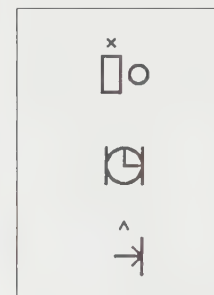
Blissymbols used herein are derived from the symbols described in the work *Semantography*, original copyright © C.K. Bliss, 1949.

September 1982, C.K. Bliss granted an exclusive, non-cancellable and perpetual, worldwide license to the Blissymbolics Communication Institute, to provide standards for the application of Blissymbols, for use by handicapped persons and persons having communication, language and learning difficulties. In 1987, the Institute was renamed Blissymbolics Communication International.

passages as often as they wish. The BlissReader section of StoryBliss begins with the opening screen showing the cover of a book gradually opening. Next, a menu with three options appears and the options are automatically scanned:



As the book opens



Initial Menu options

By choosing *Stories*, a table of contents appears listing the stories available.

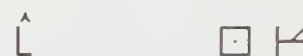
By choosing *Scan Time*, the reader is able to set the scanning time. This is done by the user clicking to begin the scan time and clicking again when the desired time has passed. The scan time can be reset at any time. It is retained upon leaving the program, so the reader need only set the scan time when a change is desired.

By choosing *Stop*, the reader can choose to exit StoryBliss.

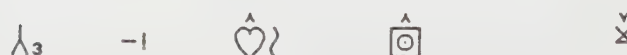
Once the scan time is set and the reader has selected a story, the cover page of the chosen story appears. From this point on, readers have a range of options available. They can listen to the story being read as they move through the pages, with just Blissymbols, just words, or Blissymbols and words, appearing on the screen. One click of their switch signals that the page should be "turned", i.e. that the next page should appear on the screen. They can choose to change the sound or to adjust the graphics either to gain more supportive cues or to make the reading more challenging.

After the reader has had time to view each page, a bar appears across the bottom of the screen:

Palle is standing up in bed.

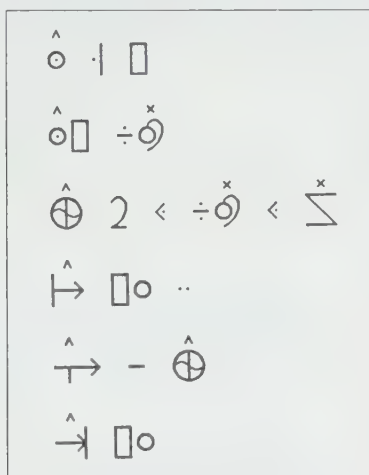


He doesn't want to sleep any more.



Screen with bar showing

By clicking when this bar is present, the following menu of options appears:



Bar menu options

By choosing *See Previous Page*, the reader can review the preceding page.

By choosing *Read Words*, any text on the page will be read again.

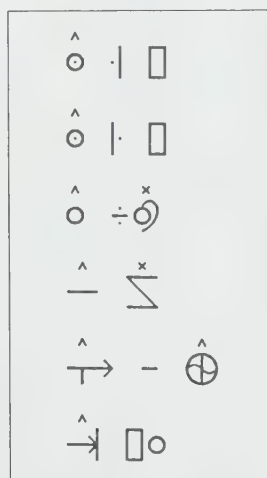
By choosing *Change "Voice" or Words or Symbols*, another menu is presented that allows the reader to make changes in the voice that reads or to choose words only, Blissymbols only, words and Blissymbols for the entire story.

By choosing *Begin Story Again*, the reader can go to the beginning of the story.

By choosing *Continue Without Changing*, the reader can resume reading.

By choosing *Stop Story*, the reader returns to the first menu.

Readers can also decide to spend more time on a page and review sections of the text (called chunks) several times. By clicking when a chunk has been highlighted, the following menu will appear:



Menu for options within chunk

By choosing *See Previous Page*, the reader can review the preceding page.

By choosing *See Next Page*, the reader can proceed to the next page.

By choosing *Say the Words*, the reader can listen to the words of the chunk being repeated.

By choosing *Remove Symbols* (for this chunk throughout entire story), the reader can focus just upon the words as they are being spoken, having removed the Blissymbol supportive cues.

By choosing *Continue Without Change*, the reader can return to the same page, ready to continue the story.

By choosing *Stop Story*, the reader returns to the first menu.

If readers choose *Say the Words* and they listen to all the words in a chunk being spoken, they can next decide to click on a word within the chunk and listen to that one word being read over and over until they click again, to move on to the next chunk. This allows readers to check on a particular word of interest or listen carefully to a favourite or difficult word.

With StoryBliss and the Macintosh, Blissymbol users are able to make decisions about the manner in which they will read stories and the time they wish to devote to reading. They are in charge of their own reading — with the help of synthetic speech expressing the words and "reading" stories for them, and with Blissymbols providing a comfortable graphic environment in which they can become accustomed to print.

The challenge for teachers will come from the decisions that must be made regarding the Blissymbol support to be given to each student. In the Blisswriter section of StoryBliss, the teacher can enter the stories and, after chunking the text, decide which Blissymbols will be helpful to the reader within each chunk. We will see many variations to the assistance that is given. In each instance it will depend upon the teacher's evaluation of the support that is needed by the beginning reader. We look forward to a sharing of the Blissymbol translations that are produced.

Provision is made within StoryBliss for the use of a scanner to copy illustrations and to include them within stories. Animation of the illustrations is also possible. We now have an exciting way of helping Blissymbol users make the transition from Blissymbols to print as well as a convenient medium for teachers to share their Blissymbol supported reading materials. □

Editor's Note:

For information relating to the use of a single switch with the Macintosh computer write Shirley McNaughton, c/o *Communicating Together*.

StoryBliss is a new software program developed by Russell Galvin and Shirley McNaughton. For information regarding distribution contact Easter Seal Communication Institute, 250 Ferrand Drive, Suite 200, Don Mills, Ontario, M3C 3P2.

CATHY FAIRLEY

The Paraphrase is written for those who are moving into traditional orthography. It offers an independent reading opportunity for the growing reader. The Paraphrase is written by Cathy Fairley, former consultant, Easter Seal Communication Institute.

Ashok of India

Ashok lives in Bombay, India. His teacher sent a letter to Kari telling about him. Here is his story.

Ashok has cerebral palsy. He can't speak. Mother Theresa has a home for children with no parents. Ashok went to live there when he was three. He spent most of his time in a bed.

When he was six, he went to school. This made Ashok happy. He learned a lot at school. He used blocks, pegs and puzzles. He learned to do more with his body. He learned to talk with Bliss.

He is ten years old now. He can read a lot of words. He points to them on his board. He can spell other words he needs. He can type too.

Now Ashok lives with a foster mother. She says he is always happy. He can do a lot for himself now. His mother and teachers are very proud of him!□

To Readers of Paraphrase

This story is from Kari Harrington's original article that appeared in *Communicating Together* Volume 7, Number 4, December 1989.



Ashok Ganguly of India

Learning from Research on Integration

BARBARA REID



Barbara Reid is a consultant with the Easter Seal Communication Institute. She has been involved in the field of augmentative communication since 1976, first in England and then in Canada. She has worked in research and training as well as consulting, and has co-authored two books and several articles on augmentative communication.

Integration is a popular issue. Few people who work in education are untouched by the subject, and the sources for our opinions encompass a wide range: personal philosophy, experience, research data, legislation, ethics, educational policy, educational theory, "the practical and the possible", and so on.

As consultants within Easter Seal Communication Institute's (ESCI) Educational Service Program, my colleagues and I are involved with a number of different students in several boards of education and pre-school programs across the province. We see students in a range of settings from fully self-contained special education classes to wholly mainstreamed programs, with a variety of stages in between. But in all the settings, some of the same questions arise. How can the nonspeaking student be a part of the class? How can the nonspeaking

student follow the curriculum of his or her grade level? What kind of social interaction can we promote between the nonspeaking student and his or her classroom peers? We struggle to help educators with these questions for many of the student we work with, because even within self-contained special classrooms, the nonspeaking student can be said to be "integrated" with classmates who talk.

Recently, three research articles which deal with integration issues have appeared in *Exceptional Children*. The first, by Maheady, Sacca and Harper, explored the effects of a classroom-wide peer tutoring program on the test scores of mildly handicapped high school students. Teachers prepared weekly study guides for each section of the class's social studies text. Students in the experimental classes worked through the study guides in pairs. At the end of the week, students were tested on the information, with the "Blue team" (half of the class) trying to score more quiz points than the "Red team". This intervention included a number of interesting features. First, there was no modification of the curriculum content to accommodate special needs students. Study guides and quizzes were the same for every student, and drawn from the set text. Secondly, the intervention required no extra tutoring time from the teacher. Once the materials had been prepared and the procedure explained, the students tutored each other. The authors do not argue against curriculum adaptations or extra help from the teachers, but they make the point that these are often offered as reasons why integration is not possible in a given situation. They were attempting to provide a teaching tool that did not depend on the "extras" which are often not available.

The results of their intervention were dramatic. In the three experimental classrooms, failing grades all but disappeared, and the number of "A" grades rose from 13% to 58%. It is also interesting to note that the peer tutoring program was

effective in raising grades for the nondisabled students as well as those who were mildly handicapped.

Reverse Integration

The second study, by Jenkins, Odom and Speltz, explored some dimensions of the social integration of mildly and moderately handicapped preschool children. Using a model which is sometimes called "reverse integration", they added four nonhandicapped children to each of four classrooms which already contained eight handicapped children. Two segregated classes containing twelve handicapped students were available for comparison. They studied the effects of the integration on the children's development in the areas of motor skills, language, preacademic skills and social competence. They also tested a program designed to promote social interaction between children, by comparing it with a "control" condition, a child-directed play program, which gave all children an equivalent amount of teacher-directed activity.

Integration, taken on its own as the placement of nonhandicapped children in the same class as handicapped children, had little effect on the developmental measures. There were no differences between groups in motor development or preacademic skills. Language skills increased for all children, whether integrated or not, who were exposed to the social interaction program, and social competence was significantly higher for the subgroup of children who were both exposed to the social interaction program and integrated with nonhandicapped peers. The children who participated in the social interaction programs also demonstrated a much higher level of social integration, through such behaviours as less isolated or unoccupied play, more interactive play, and more negative interaction.

The authors conclude that, while the effects of placing handicapped and nonhandicapped children in the same class can be minimal even for social interaction, programs which structure interactions and expose

children to appropriate behaviours can have a very strong effect.

Social Effects of Integration

The third article, by Lynn Fox, also deals with the social effects of integration. Her research focused on a program to enhance children's acceptance of learning disabled peers within their classroom. In setting up her interventions, Fox referred to studies on friendship and attraction which show that people choose friends who they perceive to be psychologically similar. This similarity helps people involved in a friendship or relationship by giving them a more predictable and understandable interpersonal environment. Fox's "mutual interest" condition was based on this research, and involved pairs of children working together to find common interests within a variety of topic areas. One control condition, "academic activity" involved pairs of children working together on academic games assigned by the teacher, while a second control condition involved students working independently from their partners with similar materials to the "academic activity" groups. Each pair or dyad consisted of one nonhandicapped and one learning disabled student. Each child was rated by his or her partner both before and after the interventions, on a measure of social acceptance. In general, the learning disabled children received lower social acceptance ratings from their nonhandicapped partners than they gave to those partners. As predicted, the partner ratings of students in the "mutual interest" group significantly improved, while those for the other groups did not.

In this study, simple proximity in the classroom, working in parallel, and working cooperatively on an academic task did not increase peer acceptance ratings for integrated learning disabled students. The only effective intervention that enhanced the acceptance of the learning disabled students was one in which some mutual bases for friendship were explored.

Although the population and central question of each article are different, one common trend emerges. If we have educational and social goals for all of the students, then integrated placement is not enough.

Some planned interaction between the "special" students and the "regular" students is necessary to significantly affect both their acceptance by nonhandicapped peers and their social skills.

Communication Applications

These articles did not deal specifically with nonspeaking students, and all authors cautioned against overgeneralizing the results. On the other hand, the trend in the findings was consistent across ages and disabilities, and leads to interesting questions about how to implement some of the effective procedures with students who use augmentative communication.

Peer tutoring with nonspeaking students would depend on two key elements. The nonspeaking student would have to be supplied with the sign, symbol or printed word vocabulary to ask and answer the study questions posed in each unit, and the nondisabled peer would have to be able to understand each utterance. The nonspeaking student would also have to have the skills and the vocabulary to take his or her turn as either the question asker or responder.

Nonspeaking preschoolers would also need a range of skills to join in a social cooperation game with a nondisabled peer. While it would be possible for them to engage in social interaction without a communication system, the experience might be enriched for both children if they had a vehicle for transmitting and receiving messages through sign or symbols. A general "interaction board" might facilitate this, with symbols for "your turn", "my turn", "what do you want to be?", and so on.

The third intervention, a program for exploring mutual interests, presents a challenge for nonspeaking students. Such a discussion should be open-ended, but only nonspeaking spellers and some very capable Blissymbol users have an infinite number of words at their disposal. It might be possible to approximate this condition by creating a word bank for each topic which the partners would be discussing. To encourage more interaction, the teacher could set the topic (e.g. music), provide resource books relevant to the

nonspeaking student's mode of communication (e.g. sign language dictionaries or symbol source books), and set the student the task of developing a word bank of music items, using the student's system.

A lot of improvising would be required for such a topic, for it is unlikely that any formal system can keep up with types of music, names of current groups, and certainly not with song titles. The preparation exercise might well add an important dimension of understanding to the student partners, which could carry over to the task of identifying three areas of common interest in a given topic.

All of these interventions would likely require extra preparation in order to involve nonspeaking students. On the other hand, the studies suggest that the preparation might lead to interactions which could greatly increase the effectiveness of integration programs. □

References

- Fox, L. (1989). Peer acceptance of learning disabled children in the regular classroom. *Exceptional Children* (1), 50-59.
- Jenkins, J., Odom, S., and Speltz, M. (1989). Effects of social integration of preschool children with handicaps. *Exceptional Children* (5), 420-428.
- Maheady, L., Sacca, M.K., Harper, G. (1988). Classwide peer tutoring with mildly handicapped high school students. *Exceptional Children*, 55 (1), 52-59.

Have You Moved?

Please remember to let us know your new address. If possible send an address label from a past issue.

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May 3, 4, 1990.
For more information contact:
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M3J 1P3
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Augmentative Communication Rounds

This group of professionals
meets the second Thursday of
each month at 4:30 pm, to
discuss issues of relevance to
those involved in the field of
augmentative communication.
Video tapes of most of the
sessions are available through:
Sue Thurston, Technology
Access Clinic, Chedoke
McMaster Medical Centre
P.O.Box 200, Station A,
Hamilton, Ontario L8N 3Z5
Telephone (416) 521-2100
The following is a list of
subjects to be covered and
locations of the meetings for
the next few months:

March 8, 1990 - **Research
Issues**, Queen Elizabeth
Hospital. Telephone 597-5111
April 12, 1990 - **Issues relating
to the Adult Population**,
Westpark Hospital.
Telephone 243-3600
May 10, 1990 - **Education and
Integration Issues**, Erinoak
Treatment Centre.
Telephone 820-7111
June 14, 1990 - **Service
Delivery Model**, Sunny View
School. Telephone 393-9275

Richmond Hill Youth Wins Right to Attend Classes with her Peers

Becky Till recently enjoyed her
first day of classes with
students in a regular high
school after a four year struggle
to be allowed to attend. Becky
has cerebral palsy and is
nonspeaking. She communi-
cates using an eye gaze tech-
nique to indicate symbols on a
communication board. She
attends Sacred Heart Catholic
High School in Newmarket and
is enrolled with 15 other
students in a functional life
skills program. Her classes
include family studies, geog-
raphy, and music. Becky is
thrilled with her new school
and the opportunity to interact
with her peers.

Reach for the Top

CEC's 68th Annual
Convention
April 23 - 27, 1990
Toronto, Ontario.
For further information
contact: Peg Mock
Sunny View School
450 Blythwood Rd.,
Toronto, Ontario M4N 1A9
(416) 393-9275

DADA'S CLIENT SERVICE PROGRAM CLOSES DUE TO LACK OF FUNDS

Editor's note:

We regret to publish this press release of the closing of DADA. There is a definite lack of services available to the adult disabled population. DADA was an organization that accepted the challenge to serve where they saw the need. We wish them luck in the future in continuing to address the needs of disabled people in Ontario.

"Due to insufficient funds, DADA's client service programs - the Technical Access and Assessment Program (TAAP) and the Learning Lab - were forced to close, effective January 15th, 1990.

DADA's research and development activities will continue to operate out of our current office. DADA, Designing Aids for Disabled Adults is a non-profit organization formed in 1985 with the following objectives:

- to research and develop low cost technical aids
- to provide education and training programs to adults with disabilities
- to encourage the engineering and science community to become more involved in socially beneficial applications of technology.

Since its inception five years ago, DADA has endeavoured to improve the quality of life of adults with disabilities through the application of technology in areas of communication, employment and recreation. The TAAP program was developed to assist adults with disabilities in the selection and use of communication aids.

Through the TAAP program, DADA strove to provide a quality service equivalent to the service subsidized by the Ontario Ministry of Health for children with disabilities. We have long awaited the Ministries expansion of this service to adults. Recognizing the need for, as well as, anticipating the expansion of this service, we set up the TAAP program funded largely through private donations and revenues from technical projects.

However, funding the TAAP program this way was always considered a short term measure which would allow us to meet an immediate need in the community until a more secure funding source was available. This funding has not come through to date.

Through the Learning Lab, DADA provided individualized instruction to adults with disabilities on the use of computers, computer applications and assistive technology. Many participants of this program required assistance in reading and writing; while others required vocational upgrading.

The Learning Lab was both a teaching facility and a resource centre for many adults with disabilities. The centre was used on a weekly basis by a number of students from the Toronto Area. These unique programs addressed needs that are not currently being met elsewhere in the community, and we deeply regret the impact that these closures will have on the participants of our programs.

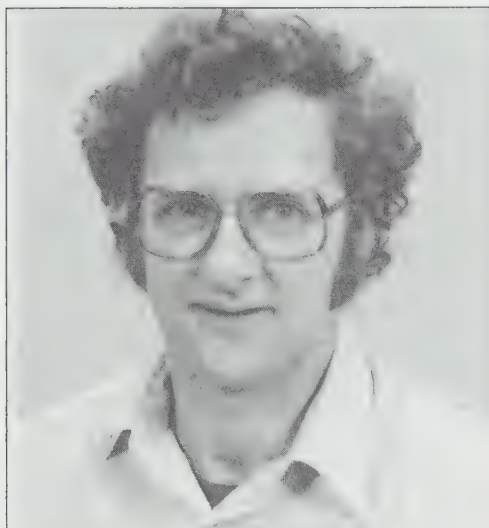
For further information on the closure of DADA, contact Leslie Dolman, (416) 975-9206."

CHILD DEVELOPMENT CENTRE WITH A DIFFERENCE

Kingston has a rather unique set up in their Assistive Devices Program offered at the Child Development Centre. Most A.D.P. centres have their services contained in one environment but Kingston uses two sites to serve their clients. This unique approach also combines two Ministries, Community and Social Services at Osgoode and the Ministry of Health at the Child Developmental Centre, Hotel Dieu Hospital. The site offers Assessment, Prescription (Level II), Programming, Facilitator Training, Referral and Education for both face to face and written communication. Clients should be under 19 when referred and qualify for special needs funding within the Frontenac, Lennox and Addington, Leeds and Grenville, Prince Edward, Hastings, and Lennox counties. Clinics offered at the Kingston ADB include cleft palate, Developmental, ENT, Facial anomalies, Feeding and Swallowing, Learning, Orthopedic, and Wheelchair and Seating. The waiting list at Kingston is not extensive which means that clients are not faced with long waits before they receive service. Anyone requiring further information about the Kingston Assistive Devices Program and the Augmentative Communication Service can contact Orrin Kom at the Child Development Centre, Hotel Dieu Hospital, 166 Brock Street, Kingston, Ontario, K7L 5G2. Telephone (613) 544-3310.

The Beginning of the End of a Century

GEB VERBURG



"Research and Publications" is written by Geb Verburg, who has been involved in the field of nonspeech communication since the mid-seventies. A cognitive scientist, Mr. Verburg is currently working as a research associate in several projects at the Hugh MacMillan Medical Centre, Toronto.

The seventies were the decade of the emergence of organized graphic symbol systems. The eighties saw the birth and early childhood of augmentative and alternative communication (AAC) as a profession and an independent academic and service discipline. Adolescence, with its rapid growth and turbulence will be upon us in the nineties. I do not know if separation and identity crises are part of a discipline's growing up but conflicts or clashes of opinion are a virtual certainty in the 1990s. Before I try my hand at some next decade forecasting, I want to recognize the exemplary development in AAC which did not, of course, happen by itself.

Much of the credit for AAC's admirable growth goes to the users, professionals and parents, each one of you, congratulations for your efforts, dedication, and enthusiasm. Keep it up for yet another decade. The editors of the AAC journal, too, should be acknowledged for turning our flagship publication into the

most cited source at the recent ASHA conference. Congratulations and a great decade to you all.

Forecasting for the Next Decade

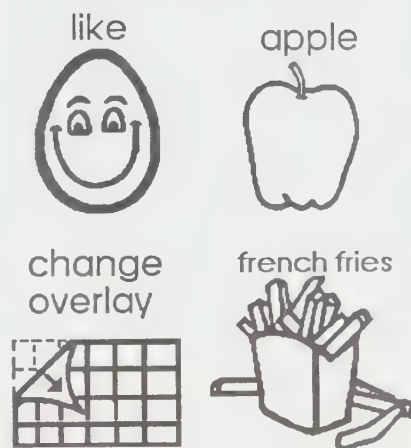
What seeds lie within AAC or the rehabilitation or health care fields that are likely to grow in this coming decade? I can think of a number of issues, some positive, some realistic or tough, some very challenging and exciting.

First, I think that technology is going to deliver some of the nicest marvels of the 90's. Speech prediction, or vocaids that can learn a new vocabulary in an hour or so and that can continue to adapt, or vocabularies that will adapt themselves to the environment, to the topic under discussion, or to the voices of the speaking partners ought to become a reality. Smart wheelchairs and robot assistants are a fairly safe bet for this decade, even robot pets or robot pals may be common.

A second positive development, that is already going strong but that can still grow, is the increase in parent awareness and parent involvement, or the empowerment of parents and clients. I see the empowerment of the parents and clients in the AAC and rehabilitation fields as a development that is linked to both a move towards more community-based service and to a move towards other than the patient oriented (medical) service model.

I believe that the issue that will cause us the most worry, the most difficult issue to face us, is the tremendously increasing cost of health care and independent living support. There are times when I am afraid that the emphasis that government places on community based services is nothing more than a cost cutting measure. This is reminiscent of the integration process which at least has a justification in the greater independence that is part fostered and part forced by the integration of developmentally delayed persons into society. Transferring services to the community can be a

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very positive development especially when the users of the services have power over the deployment of the resources, and can share in the decision making, allocation and implementation. Encouraging an empowered user to participate in the goings-on of his/her community can have a marvelous effect on attitude change in that community (as well as inducing occasional conflicts of course).

While speaking of the integration movement, it would probably serve us well to take a closer look at how professionals, working with persons who are developmentally delayed, handle or have handled the dismantling of the large residential facilities. We, too, may end up working in facilities without walls, with our clients scattered over a large geographical area. After all, if people are not "diseased" then there is no reason to keep them in special buildings. One approach that we are testing out at HMMC is to conduct home or school-based wheelchair skills training sessions using portable computers and modems to direct and review client progress. The roles of the profes-

sionals will change and one of the first priorities will be to become an information broker and educator who informs the parents and clients and gives them access to all (relevant) information as early as possible.

An issue that I have discussed before and will no doubt discuss again later is vocational rehabilitation, the world of work, the quality of working life for persons with disabilities. Studies by Richard Goldberg and colleagues compared the level of vocational development of children who are disabled with that of children who are able bodied (Goldberg and Johnson, 1978, more data and better statistics in: Goldberg, 1989). The groups compared included orthopedic, facial burns, congenital heart failure, delinquent, developmentally disabled (not clearly demarcated from) learning disabled and mentally retarded (who are lumped together). The main result of the study is that vocational skills of persons who are orthopedically disabled, as well as those in all categories mentioned, are significantly lower than the skills of able-bodied children. Only children with cystic fibrosis score at the level of able-

bodied children. Although I have qualms with the categorizations and some of the data reporting procedures, the general point of the papers is clear and unambiguous. In a sentence: the low rate of employment at adolescence and maturity has a precursor in the lower scores on vocational realism, occupational awareness, educational plans, and degree of initiative. That, I believe, is an obvious challenge to professionals and educators, because it is one thing to enable a person to communicate and attain an education, we must learn to include information on finding and holding (a) job(s) as an integral part of that education.

My last forecast for the 90s is that in this decade we will realize that our method of knowing or our cognitive processes are rather too outdated, egocentric and divisive to serve us adequately in the next century. I will do my best to contribute to the tearing down and rebuilding of the very method and process of knowing. I am not yet sure how this reconstruction process will affect persons who are nonspeaking, except that our old way of knowing is very closely linked with

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our way of using language. So, if we change one, we will necessarily change the other. I believe, therefore, that towards the end of the 90s we will officially enter into the post-literate society. That means that the media of speech, text, and print will cease to be the dominant or most common means of communication. Video, music, and direct or non-mediated communication methods will be developed. This of course is extremely exciting, also highly speculative mind you, but you had better start tuning those 'little grey cells'. □

References

- Goldberg, R.T. and Johnson, B.D. (1978). A comparative study of five groups of handicapped children in vocational rehabilitation. *Scandinavian J. Rehab. Med.* 10, 215-220.
- Goldberg, R.T. (1989). A comparative study of vocational development of abled bodied and disabled persons. *Int. J. Rehab. Research* 12 (1), 3-15.

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For more information contact:
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The price with rechargeable battery and cable is \$1,595.00. For information contact: Adaptive Communication Systems, Inc., Box 12440, Pittsburgh, PA 15231

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Don Johnston Developmental Equipment, Inc. has announced the latest model Adaptive Firmware Card for Apple 11e and Apple 11GS users. The Model G32e with System Software 4.1 can be used in both computers.

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SCHEDULE OF EVENTS

ESCI Special Interest Seminars

In Toronto, Ontario

Seminars planned for the Spring 1990:

- Intermediate Signing for Use with Augmentative Communicators. A six week evening course on Mondays beginning April 2, 1990.
- Programming for Augmentative Communicators in the Elementary Classroom. Tuesday, April 3, 1990
- Bliss in a Day. Wednesday, April 4, 1990
- Developing Communication Programs for Developmentally Disabled Students. Six sessions on alternate Thursday evenings beginning April 5, 1990
- Selecting Graphics for Communication Boards. Thursday, May 24, 1990
- Blissymbol Elementary Workshop. Monday to Wednesday, May 28-30, 1990

All seminars will be held in the ESCI Resource Room, 250 Ferrand Drive, Don Mills, Ontario M3C 3P2.

Inquiries are invited from organizations wishing to host one of these seminars in their own facility.

For further information contact:
Training Coordinator
Easter Seal Communication Institute,
250 Ferrand Drive, Suite 200,
Don Mills, Ontario M3C 3P2
Telephone: (416) 421-8377, ext. 2205

Technology and Persons with Disabilities

In Los Angeles, California

- March 21-24, 1990

Contact: Dr. Harry J. Murphy,
California State University, Northridge,
Office of Disabled Student Services — DVSS, Northridge,
CA 91330
Telephone: (818) 885-2578

Focus 90 Integration: A Shared Responsibility

In Victoria, British Columbia

- April 4, 1990

A conference emphasizing a cooperative approach toward the integration of children with disabilities in regular school settings.

Contact: Mrs. Barbara Smith,
c/o Victor School, 2260 Victor Street,
Victoria, British Columbia, V8R 4C5
Telephone: (604) 595-7511

Blissymbolics Communication International Elementary Workshops

In Albany, New York

- April 20-22, 1990

Contact: Dorie Godfrey, VP Training and Development, Centre for the Disabled, 700 South Pearl Street, Albany, New York 12202
Telephone: (518) 489-8336

In Toronto, Ontario

- May 28-30, 1990

Contact: Training Coordinator,
Easter Seal Communication Institute, 250 Ferrand Drive, Suite 200, Don Mills, Ontario M3C 3P2
Telephone: (416) 421-8377 ext. 2205

Annual CEC Convention "Reaching for the Top"

In Toronto, Ontario

- April 23-27, 1990

Contact: CEC Department of Professional Development, The Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091 U.S.A.
Telephone: (703) 620-3660

Fourth International ISAAC Conference

In Stockholm, Sweden

- August 12-16, 1990

Contact: The Institute for Integration, Norrmalmstorg 1, S-111 46 Stockholm, Sweden

Technology Classes at Summer Camp

In Georgetown, Colorado

- July 15-20, 1990

Two camps are being offered at the same time: one camp is for augmentative device users, siblings and professionals who work with them. The second camp is for adaptive firmware card users and professionals or parents who work with them.

Contact: David Schmitt, Director, Center for Adapted Technology, Colorado Easter Seal Society, 5755 West Alameda, Lakewood, CO 80226 U.S.A.
Telephone: (303) 233-1666

About the Publisher

The Easter Seal Communication Institute (ESCI), formerly the Blissymbolics Communication Institute, has worked since its inception toward enhancing the lives of nonspeaking people. Now operating as a department of The Easter Seal Society, Ontario, ESCI focuses on supporting augmentative communicators and their families and the professionals who work with them through its strategic goals.

- 1) Using a collaborative consultative model to develop and implement services to improve the quality of education for nonspeaking children and young adults.
- 2) To educate, inform and increase the awareness of the community about the needs and abilities of nonspeaking children and young adults.
- 3) To contribute to and participate in the growing field of augmentative and alternative communication.
- 4) While supporting a number of communication systems, to recognize the system of Blissymbolics as a valuable means to advance augmentative and alternative communication.

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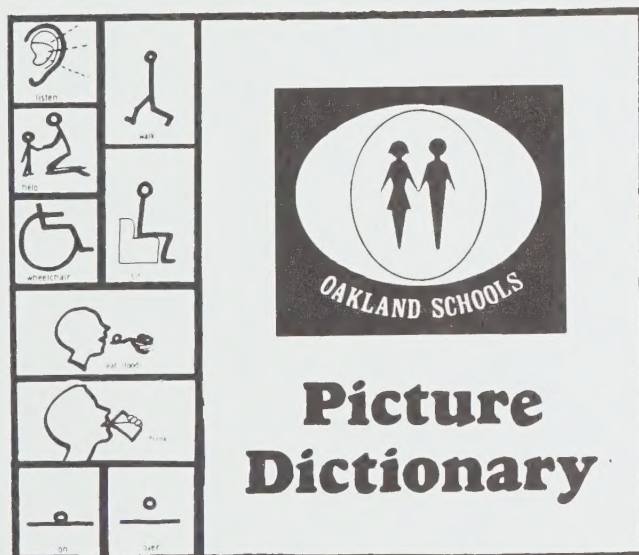
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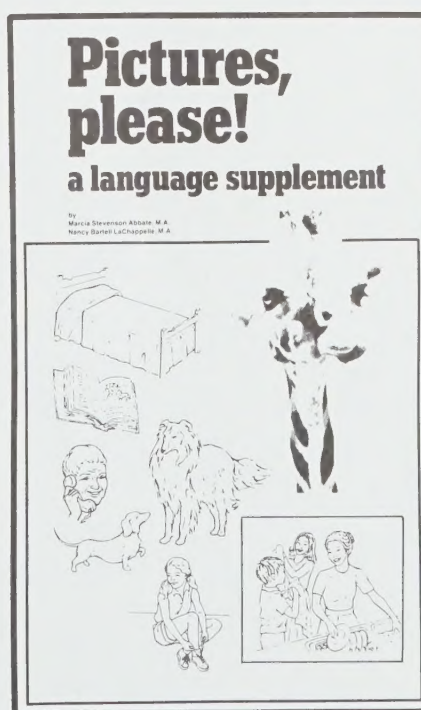
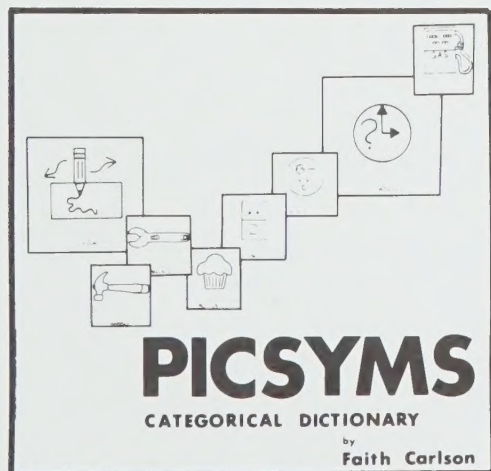
- Core Picture Vocabulary
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mouth 	(to) communicate 	funny 	song
mind 	(to) learn 	interesting 	school
feeling 	(to) smile 	special 	friend

Picture Communication Symbols



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